



## Center for Health Statistics



September  
2006

DATA  
SUMMARY  
No. DS06-  
09000

This Data  
Summary is  
one of a  
series of  
leading  
cause of  
death reports.

### Highlights

- ⌘ **Unintentional injuries ranked fifth among the leading causes of death in California and in the U.S.**
- ⌘ **In California, motor vehicle accidents accounted for 41.6 percent of all unintentional injury deaths in 2004.**
- ⌘ **California's age-adjusted death rate of 29.6 per 100,000 was lower than the U.S. rate of 36.6.**
- ⌘ **California did not meet the Year 2010 National Health Objective of an age-adjusted death rate of no more than 17.1 deaths per 100,000 population.**

# Unintentional Injury Deaths California, 2004

By Carol Lau

## Introduction

"Unintentional injuries are a leading cause of death for all Americans, regardless of age, race, gender, or economic status."<sup>1</sup> In 2004 unintentional injuries were the fifth leading cause of death in the United States (U.S.) and in California.<sup>2,3</sup> Preliminary data show from 2003 to 2004 unintentional injury deaths in the U.S. declined 0.5 percent from 109,277 deaths to 108,694 deaths, respectively.<sup>2,4</sup> During this same period, unintentional injury deaths rose 1.4 percent among California residents from 10,470 deaths in 2003 to 10,614 deaths in 2004.<sup>3</sup>

Unintentional injury deaths are preventable if safety measures are in place. Implementation of underage drinking, seatbelt and helmet laws, and safety awareness campaigns have proven to be successful in preventing unintentional injury deaths. At the national level, the Centers for Disease Control and Prevention (CDC) is working to prevent unintentional injury deaths through research projects and nearly 30 grants and cooperative agreements.<sup>1</sup>

In California, the death toll from motor vehicle accidents accounted for the largest portion of unintentional injury deaths (41.6 percent) in 2004. Some of the other major causes of unintentional injury deaths consisted of poisoning and exposure to noxious substances (23.8 percent), which includes drugs and other substances, and falls (15.5 percent). Combination of these three causes represented 80.9 percent of all unintentional injury deaths in California.<sup>3</sup>

<sup>1</sup>National Center for Injury Prevention and Control. Activity Report 2004 CDC's Unintentional Injury Prevention Program. Atlanta: Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, 2005.

<sup>2</sup>National Center for Health Statistics. Deaths: Preliminary Data for 2004, National Vital Statistics Reports. DHHS Publication No. (PHS) 2006-1120, PRS 06-0130, Vol. 54, No. 19. June 2006.

<sup>3</sup>State of California, Department of Health Services. Death Records. 2003, 2004.

<sup>4</sup>National Center for Health Statistics. Deaths: Final Data for 2003, National Vital Statistics Reports. DHHS Publication No. (PHS) 2006-1120, PRS 06-0093, Vol. 54, No. 13. April 2006.

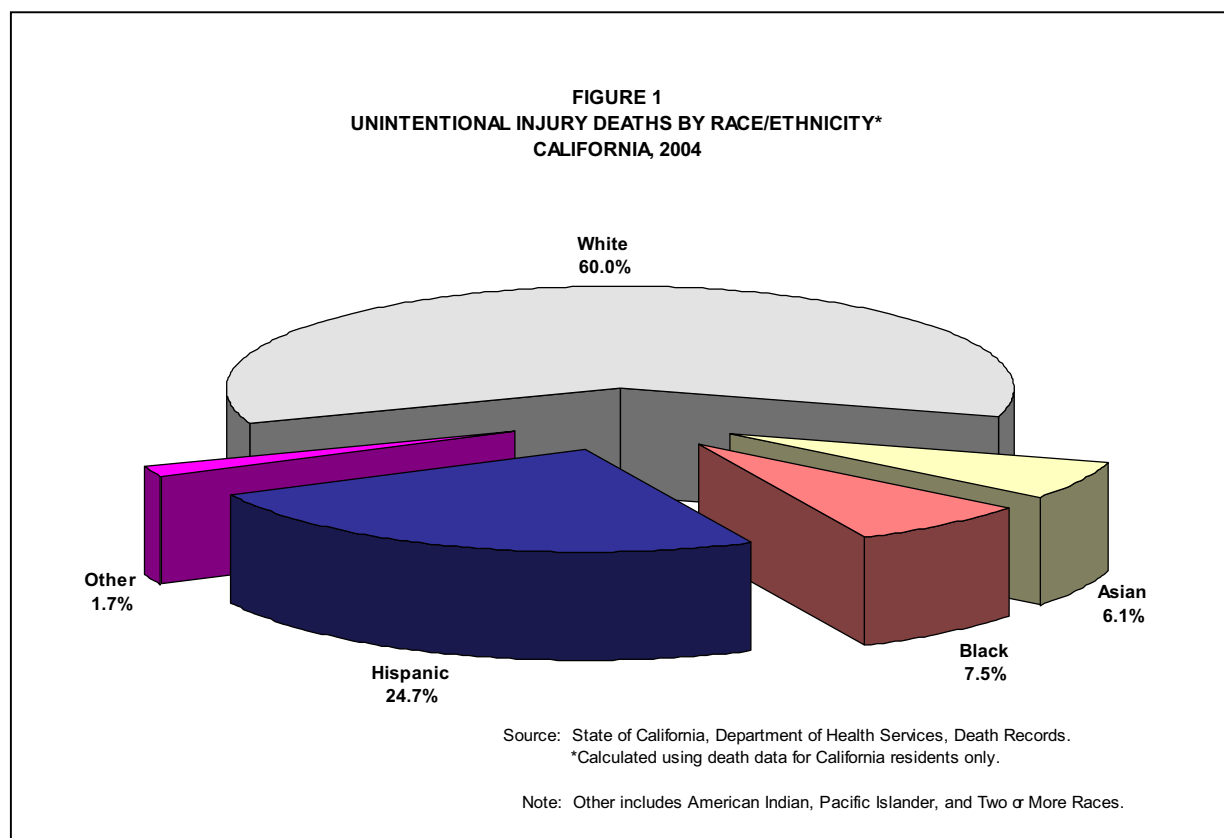
A description of [methods](#) and a brief overview of [data limitations](#) and [qualifications](#) are provided at the end of this report.

Due to the prevalence of unintentional injury deaths in this country, the U.S. Public Health Service established a health objective for Healthy People 2010 (HP2010) seeking to reduce the number of unintentional injury deaths to an age-adjusted rate of no more than 17.5 per 100,000 population.<sup>5</sup> The rate for the HP2010 unintentional injury objective changed from 17.5 to 17.1 per 100,000 population as a result of a midcourse review.<sup>6</sup> California with an age-adjusted rate of 29.6 did not meet this objective.

This report presents data on California's unintentional injury deaths and includes data tables displaying the number and rate of unintentional injury deaths by race/ethnicity, age, and sex with analysis of crude and age-adjusted death rates for 2004. Data in this report are extracted from vital statistics records with deaths attributed to unintentional injuries as defined by the International Classification of Diseases, Tenth Revision (ICD-10) codes V01-X59 and Y85-Y86 in accordance with the National Center for Health Statistics Reports.<sup>7</sup>

## Unintentional Injury Deaths

**Table 1** (pages 11 to 12) presents data on unintentional injury deaths for California residents by race/ethnicity, age group, and sex for year 2004. The total number of unintentional injury deaths among California residents was 10,614 of which 7,043 were male (66.4 percent) and 3,571 were female (33.6 percent). Over 82 percent of the total unintentional injury deaths occurred among California's adult population aged 25 and older.



<sup>5</sup>United States Department of Health and Human Services. Healthy People 2010 Objectives (Second. Edition, in Two Volumes). Washington, D.C., January 2001. Revised Midcourse Review.

<sup>6</sup>U.S. Centers for Disease Control and Prevention (CDC), Health People 2010, CDC Wonder website at URL: <http://wonder.cdc.gov/data2010/obj.htm>

<sup>7</sup>National Center for Health Statistics. Vital Statistics, Instructions for Classifying the Underlying Cause of Death. NCHS Instruction Manual, Part 2A. Hyattsville, Maryland: Public Health Service, 2005.

See the [Methodological Approach](#) Section later in this report for an explanation of crude, age-specific, and age-adjusted death rates.

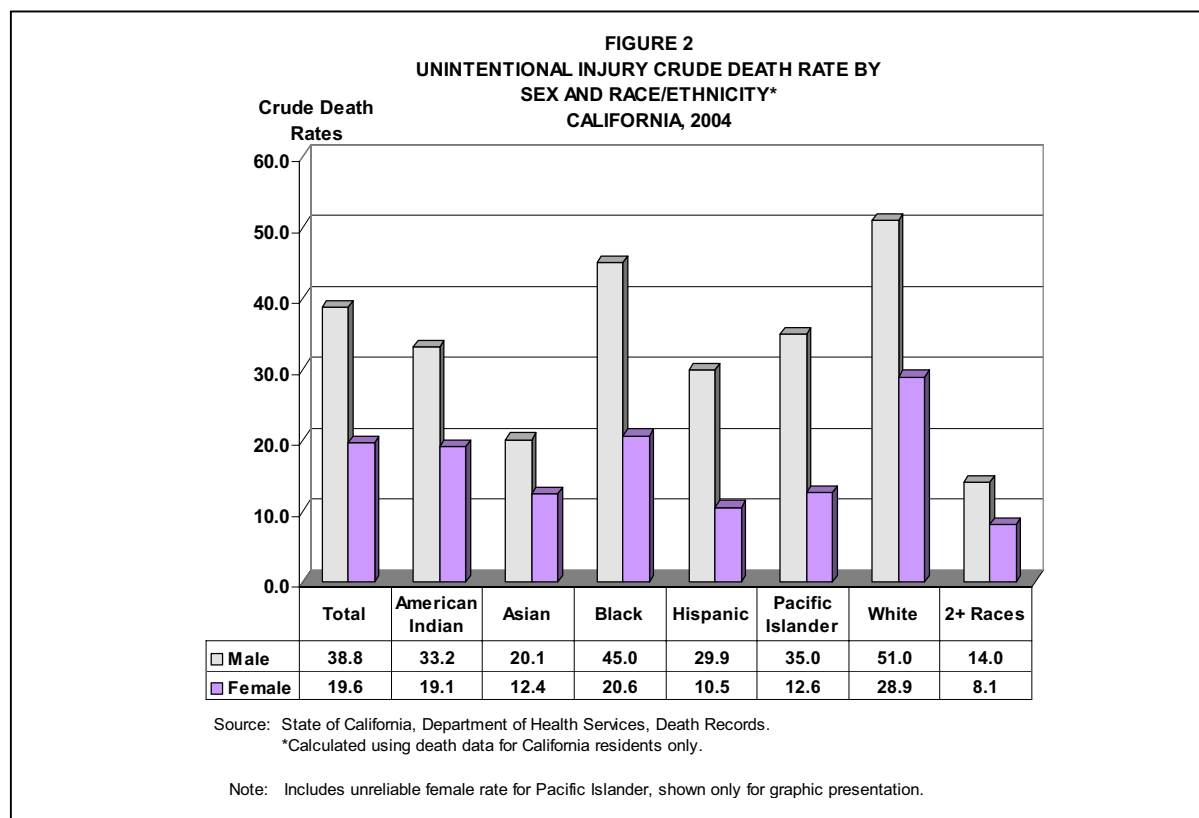
**Figure 1** (page 2) shows that Whites had the highest percentage (60.0 percent) of the total unintentional injury deaths in California, followed by Hispanics (24.7 percent), Blacks (7.5 percent), and Asians (6.1 percent). American Indian, Pacific Islander and Two or More Races combined as Other accounted for 1.7 percent of the total unintentional injury deaths.

## Unintentional Injury Crude Death Rates

As shown in **Table 1** (pages 11 to 12), California's unintentional injury crude death rate was 29.2 deaths per 100,000 population for 2004. Comparison to the 25.9 crude death rate in 2000 indicates that the increase in rates was statistically significant.<sup>8</sup>

In 2004 Whites had the highest crude death rate (39.9) followed by Blacks (32.6), American Indians (26.0), Pacific Islanders (23.8), Hispanics (20.5), Asians (16.2), and Two or More Races (11.0).

**Figure 2** shows the 2004 unintentional injury death rate per 100,000 population for California residents by sex and race/ethnicity. Overall, males had significantly higher rates than their female counterparts, 38.8 and 19.6, respectively. The gender difference was statistically significant among each race/ethnic group with reliable crude death rates.

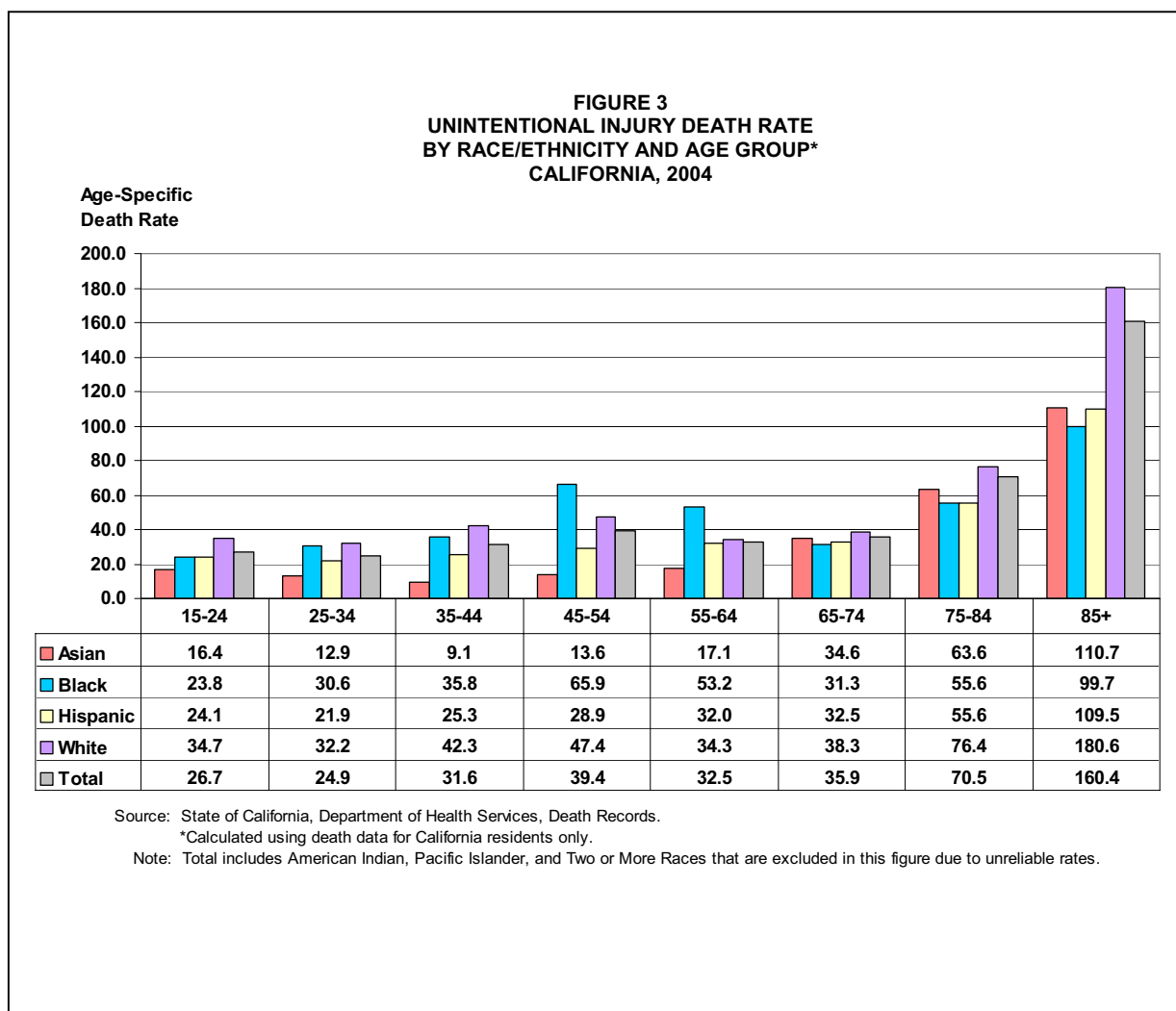


<sup>8</sup>Wilson, C. Suicide Deaths, California 2000-2003. Center for Health Statistics, California Department of Health Services. August 2005.

## Unintentional Injury Age-Specific Death Rates

**Table 1** (pages 11 to 12) shows males had higher reliable age-specific death rates than females in California and within each specific race/ethnic group in 2004. Among California residents, males and females in the age group 85 and older had the highest age-specific death rates 206.0 and 136.6, respectively. The lowest age-specific death rates for both females (5.1) and males (3.6) occurred in the 5 to 14 age group. The differences between male and female rates in age groups 85 and older and 5 to 14 were significant.

**Figure 3** displays the age-specific unintentional injury death rates by race/ethnicity and age group in 2004. The highest reliable age-specific death rates in this graphic display are shown for Whites in all age groups except from those aged 45 to 54 and 55 to 64 where Blacks had the highest rates. The lowest reliable rates occurred among Hispanics aged 5 to 14, Asians aged 15 to 64, and Blacks aged 65 and older. Although not displayed in **Figure 3**, **Table 1** shows Hispanics had the highest rate in age group 1 to 4, while Whites had the highest rate in age group 5 to 14.

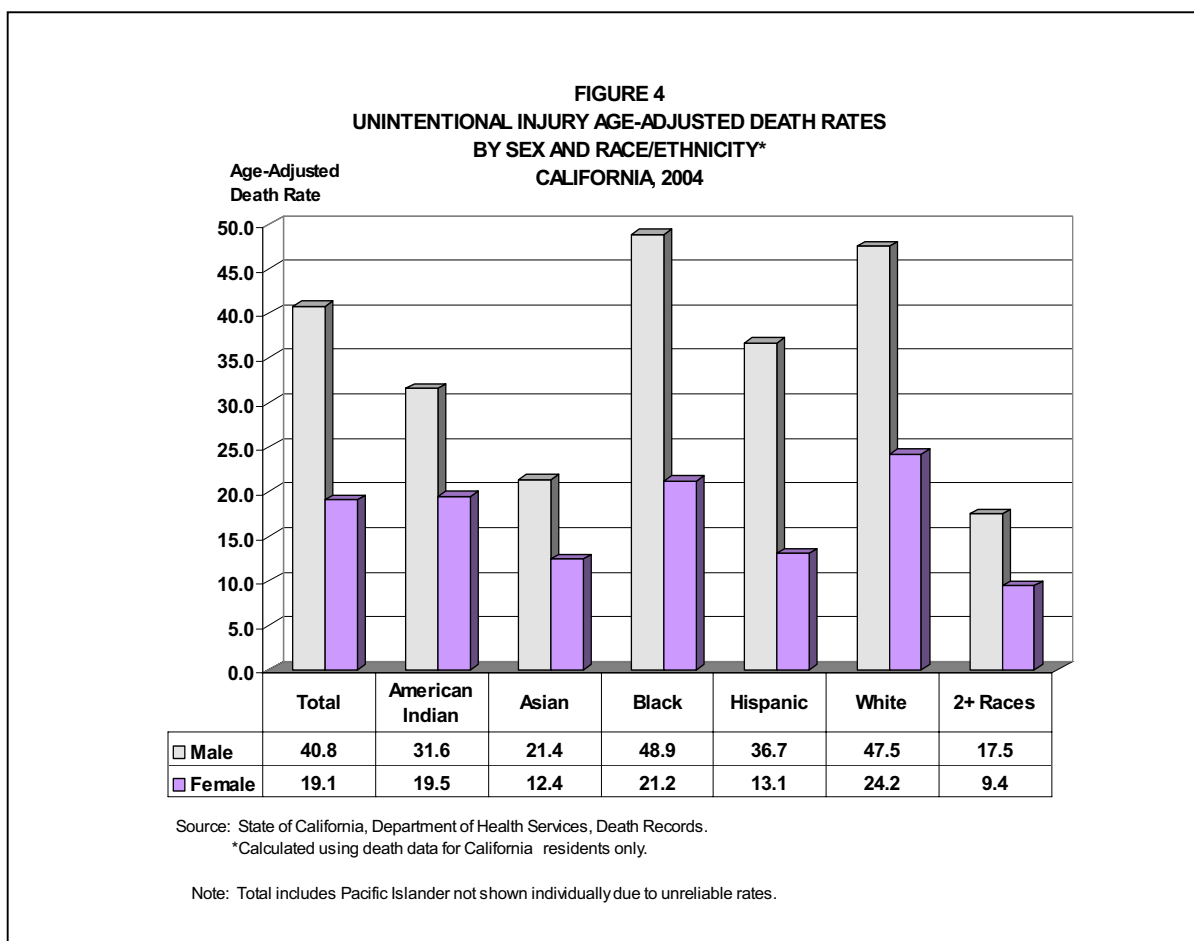


You can read more about crude and age-adjusted death rates on the National Center for Health Statistics Web site at [www.cdc.gov/nchs](http://www.cdc.gov/nchs)

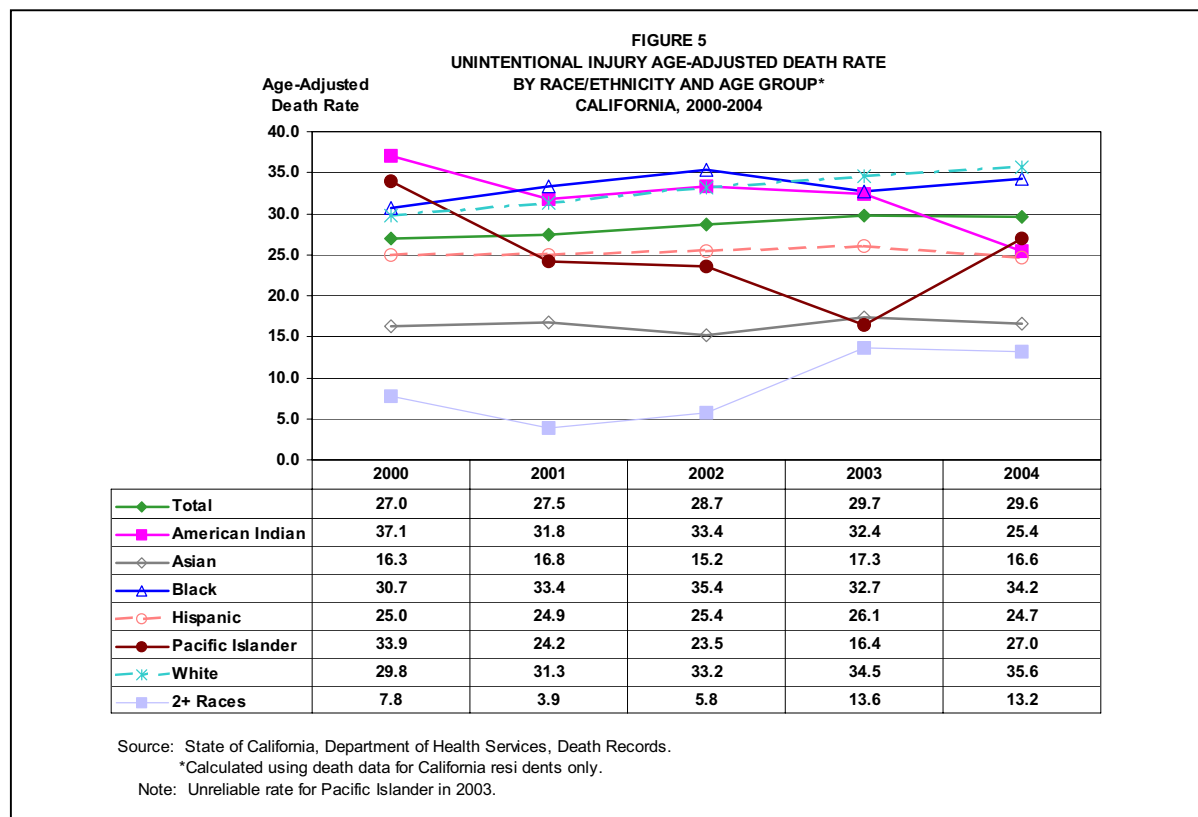
## Unintentional Injury Age-Adjusted Death Rates

California's age-adjusted death rate of 29.6 per 100,000 population in 2004 was lower than the U.S. rate of 36.6.<sup>2</sup> As shown in **Table 1** (pages 11 to 12), California's age-adjusted death rates varied among sex and race/ethnic groups. The male age-adjusted death rate among California residents was 40.8 per 100,000 population, which was significantly higher than the female rate of 19.1. Whites had the highest age-adjusted death rate (35.6) followed by Blacks (34.2), Pacific Islanders (27.0) American Indians (25.4), Hispanics (24.7), Asians (16.6), and Two or More Races (13.2). The age-adjusted death rate for Whites was significantly higher than rates for American Indians, Asians, Hispanics, and Two or More Races.

**Figure 4** shows age-adjusted death rates by race/ethnicity and sex. In 2004 the male age-adjusted death rates for Blacks (48.9) and Whites (47.5) were significantly higher than reliable rates of males in the Hispanic (36.7), American Indian (31.6), Asian (21.4), and Two or More Race (17.5) groups. Among females, Whites had the highest age-adjusted death rate (24.2), which was significantly higher than the reliable rates for Blacks (21.2), Hispanics (13.1), Asians (12.4), and Two or More Races (9.4).



**Figure 5** shows the overall age-adjusted unintentional death rates varied among each race/ethnic group from 2000 to 2004.<sup>8</sup> The largest percentage increase in rates between 2000 and 2004 was seen in Two or More Races (69.2 percent) followed by Whites (19.5 percent), Blacks (11.4 percent), and Asians (1.8 percent). The largest decrease in rates comparing 2000 and 2004 was seen in American Indians (-31.5 percent) followed by Pacific Islanders (-20.4 percent) then Hispanics (-1.2 percent). Except for Asians and Hispanics, the percentages of change were significant.



## Unintentional Injury Death Rates for California Counties

**Table 2** (page 13) shows the number of unintentional injury deaths for 2004 with crude and age-adjusted death rates for California and its 58 counties.

The three counties with the highest average number of deaths were Los Angeles County (2,270.3) followed by San Diego County (820.0) and Orange County (657.7).

Among the 45 counties with reliable crude death rates, Humboldt County had the highest rate (73.1 per 100,000 population), which was 3.8 times higher than the lowest rate (19.1) in Santa Clara County. Humboldt County also had the highest reliable age-adjusted death rate (72.9) and Santa Clara County had the lowest reliable rate (20.1). Twenty-seven counties had age-adjusted death rates that were significantly different than the State rate; 21 of the counties had higher rates than the State rate of 29.3 and 6 had lower rates.

The HP2010 National Health Objective to reduce unintentional injury deaths to an age-adjusted rate of no more than 17.1 deaths per 100,000 population was met by Alpine County (death rate based on zero deaths).

**Figure 6** (page 14) shows a thematic map of the 2002-2004 age-adjusted death rates for California counties. The Jenks natural breaks classification was used to determine the four ranges of reliable rates.

Please refer to The Data Limitations and Qualifications sections for information regarding significance testing between the county and State age-adjusted rates.

## Unintentional Injury Deaths among the Three City Health Jurisdictions

**Table 3** shows the three-year average (2002-2004) number of unintentional injury deaths and crude death rates for California's three city health jurisdictions. Age-adjusted death rates were not calculated for city health jurisdictions because city population data by age are not available.

Long Beach had the highest average number of deaths (111.0) followed by Pasadena (31.3) and Berkeley (29.3). The crude death rates were 28.2 per 100,000 population for Berkeley, 23.1 for Long Beach, and 22.0 for Pasadena.

**TABLE 3**  
**UNINTENTIONAL INJURY DEATHS**  
**AMONG THE CITY HEALTH JURISDICTIONS\***  
**CALIFORNIA, 2002-2004**

CITY HEALTH JURISDICTION	NUMBER OF DEATHS (Average)	2003 POPULATION	CRUDE DEATH RATE
BERKELEY	29.3	104,195	28.2
LONG BEACH	111.0	481,015	23.1
PASADENA	31.3	142,214	22.0

Note : Rates are per 100,000 population. ICD-10 codes V01-X59, Y85-Y86.  
\*Calculated using death data for California residents only.

Source: State of California, Department of Finance, E-4 Population Estimate for cities Counties and the State, 2001-2006, with 2000 DRU Benchmark, May 2006.  
State of California, Department of Health Services, Death records.

## Methodological Approach

The methods used to analyze vital statistics data are important. Analyzing only the number of deaths has its disadvantages and can be misleading because the population at risk is not taken into consideration. Crude death rates show the actual rate of dying in a given population, but because of the differing age compositions of various populations, crude rates do not provide a statistically valid method for comparing geographic areas and/or multiple reporting periods. Age-specific death rates are the number of deaths per 100,000 population in a specific age group and are used along with standard population proportions to develop a weighted average rate. The weighted average rate is referred to as an age-adjusted death rate and removes the effect of different age structures of the populations whose rates are being compared. Age-adjusted death rates therefore provide the preferred method for comparing different race/ethnic groups, sexes, and geographic areas and for measuring death rates over time.

Age-adjusted rates are presented when the single, summary measure is needed, but data analysts should inspect age-specific rates first.<sup>9</sup> Age-specific rates provide insights to important age-related mortality trends that can be masked by age-adjusted rates. For example, a shift in the number of deaths from one age group to another could produce very little change in the age-adjusted rate, but may warrant further investigation.

<sup>9</sup>Choi BCK, de Guia NA, and Walsh P. Look before you leap: Stratify before you standardize. American Journal of Epidemiology, 149: 1087-1096. 1999.



In addition, analysis of age-specific rates can reveal that populations being compared do not show a consistent relationship (e.g., the trend is not in the same direction for all age-specific rates) in which case the analysis of age-specific rates is recommended over age-adjusted rates.

## Data Limitations and Qualifications

The unintentional injury death data presented in this report are based on the vital statistics records with ICD-10 codes V01-X59, Y85-Y86 as defined by the NCHS.<sup>7</sup> Deaths by place of residence means that the data include only those deaths occurring among residents of California, regardless of the place of death.

The term “significant” within the text indicates statistical significance based on the difference between two independent rates ( $p < .05$ ). Significant difference between the county and State age-adjusted death rates was determined by comparing the 95 percent confidence intervals (CI) of the two rates, which are based on the rate, standard deviation, and standard error. Rates were considered to be significantly different from each other when their CIs (rounded to the nearest hundredth) did not overlap. If the upper limit of the county CI fell below the lower limit of the State CI, the county rate was deemed to be significantly lower. If the lower limit of the county CI exceeded the higher limit of the State CI, the county rate was deemed to be significantly higher. Significant differences of overlapping CIs were not addressed in this report. Overlapping CIs require a more precise statistical measure to determine significant and non-significant differences in rates because CIs may overlap as much as 29 percent and still be significantly different.<sup>10</sup>

The county or State age-adjusted mortality rates that equaled or surpassed the HP2010 objective target rate were noted as achieved, regardless of rate reliability. Readers are cautioned that measuring progress toward target attainment for a HP2010 objective using only one data point is not recommended. HP2010 guidelines recommend using absolute differences between the target rate and the most recent data point as well as a progress quotient to measure relative changes over time in monitoring progress toward achieving the objective target rate.<sup>11</sup> See the guidelines for HP2010 objectives on the NCHS website at <http://www.cdc.gov/nchs/hphome.htm>

As with any vital statistics data, caution needs to be exercised when analyzing small numbers, including the rates derived from them. Death rates calculated from a small number of deaths and/or population tend to be unreliable and subject to significant variation. To assist the reader, the 95 percent CIs are provided in the data tables as a tool for measuring the reliability of death rates. Rates with a relative standard error (coefficient of variation) greater than or equal to 23 percent are indicated with an asterisk (\*). The CIs represent the range of values likely to contain the “true” value 95 percent of the time.

Beginning in 1999 cause of death is reported using ICD-10.<sup>12</sup> Cause of death for 1979 through 1998 was coded using the International Classification of Diseases, Ninth Revision (ICD-9). Depending on the specific cause of death, the numbers of deaths and death rates are not comparable between ICD-9 and ICD-10. Therefore, our analyses do not combine both ICD-9 and ICD-10 data.

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<sup>10</sup>Van Belle G. Statistical Rules of Thumb, Rule 2.5. Wiley Publishing. March 2002.

<sup>11</sup>Keppel KG, et al. Measuring Progress in Healthy People 2010. Healthy People 2010 Statistical Notes, No. 25. National Center for Health Statistics. Hyattsville, Maryland. September 2004.

<sup>12</sup>World Health Organization. International Statistical Classification of Diseases and Related Health Problems. Tenth Revision. Geneva: World Health Organization. 1992.



To meet the U.S. Office of Management and Budget minimum standards for race and ethnicity data collection and reporting, the report presents the following race/ethnic groups: American Indian, Asian, Black, Hispanic, Pacific Islander, White, and Two or More Races. Hispanic origin of decedents is determined first and includes any race group. Second, decedents of the Two or More Races group are determined and are not reported in single race groups. In order to remain consistent with the population data obtained from the Department of Finance, the single race groups are defined as follows: the "American Indian" race group includes Aleut, American Indian, and Eskimo; the "Asian" race group includes Asian Indian, Asian (specified/unspecified), Cambodian, Chinese, Filipino, Hmong, Japanese, Korean, Laotian, Thai, and Vietnamese; the "Pacific Islander" race group includes Guamanian, Hawaiian, Samoan, and Other Pacific Islander; the "White" race group includes White, Other (specified), Not Stated, and Unknown.

Caution should be exercised in the interpretation of mortality data by race/ethnicity. Misclassification of race/ethnicity on death certificates may contribute to death rates that may be understated among American Indians, Asians, Hispanics, and Pacific Islanders.<sup>13</sup> This problem could contribute to understatements of rates for the Two or More Races group as well.

Beginning in 2000 federal race/ethnicity reporting guidelines changed to allow reporting of more than one race on death certificates. California initiated use of the new guidelines on January 1, 2000, and collects up to three races. California's population estimates recently added the multirace (Two or More Races) group. To be consistent with the population groups, current reports tabulate race of decedent using all races mentioned on the death certificate. Therefore, prior reports depicting race group statistics based on single race are not comparable with current reports.

The 2000 U.S. population standard was used for calculating age-adjustments in accordance with statistical policy implemented by NCHS.<sup>14</sup> Age-adjusted death rates are not comparable when rates are calculated with different population standards, e.g., the 1940 standard population. Additionally, population data used to calculate city crude rates in **Table 3** (page 7) differ from population data used to calculate county crude rates in **Table 2** (page 13). Caution should be exercised when comparing the crude rates of the three city health jurisdictions with the crude rates of the 58 California counties. Age-adjusted rates for city health jurisdictions were not calculated.

A more complete explanation of age-adjustment methodology is available in the "Healthy People 2010 Statistical Notes" publication.<sup>15</sup> Detailed information on data quality and limitations is presented in the appendix of the annual report, "Vital Statistics of California."<sup>16</sup> Formulas used to calculate death rates are included in the technical notes of the "County Health Status Profiles" report.<sup>17</sup>

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<sup>13</sup>Rosenberg HM, et al. Quality of Death Rates by Race and Hispanic Origin: A Summary of Current Research, 1999. Vital and Health Statistics, Series 2, No. 128, National Center for Health Statistics, DHHS Pub. No. (PHS) 99-1328, September 1999.

<sup>14</sup>Anderson RN, Rosenberg HM. Age Standardization of Death Rates: Implementation of the Year 2000 Standard. National Vital Statistics Reports; Vol. 47, No. 3. National Center for Health Statistics. Hyattsville, Maryland. 1998.

<sup>15</sup>Klein RJ, Schoenborn CA. Healthy People 2010 Statistical Notes: Age Adjustment using the 2000 Projected U.S. Population. National Center for Health Statistics, DHHS Publication, No 20. January 2001.

<sup>16</sup>Ficenec S, Bindra K. Vital Statistics of California, 2003. Center for Health Statistics, California Department of Health Services, April 2005.

<sup>17</sup>Shippen S, Wilson C. County Health Status Profiles 2006. Center for Health Statistics, California Department of Health Services, April 2006.

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**TABLE 1  
UNINTENTIONAL INJURY DEATHS  
BY RACE/ETHNICITY, AGE, AND SEX  
CALIFORNIA, 2004  
(By Place of Residence)**

AGE GROUPS	DEATHS			POPULATION			RATES			95% CONFIDENCE LIMITS					
	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL		MALE		FEMALE	
										LOWER	UPPER	LOWER	UPPER	LOWER	UPPER
TOTAL															
Under 1	67	37	30	534,769	272,800	261,969	12.5	13.6	11.5	9.5	15.5	9.2	17.9	7.4	15.5
1 to 4	160	86	74	2,047,621	1,045,813	1,001,808	7.8	8.2	7.4	6.6	9.0	6.5	10.0	5.7	9.1
5 to 14	236	141	95	5,369,098	2,750,853	2,618,245	4.4	5.1	3.6	3.8	5.0	4.3	6.0	2.9	4.4
15 to 24	1,414	1039	375	2,574,261	2,757,217	2,537,044	26.7	37.7	14.8	25.3	28.1	35.4	40.0	13.3	16.3
25 to 34	1,305	1006	299	5,231,086	2,701,183	2,529,903	24.9	37.2	11.8	23.6	26.3	34.9	39.5	10.5	13.2
35 to 44	1,794	1251	543	5,672,590	2,883,426	2,789,164	31.6	43.4	19.5	30.2	33.1	41.0	45.8	17.8	21.1
45 to 54	1,944	1,340	604	4,931,148	2,440,823	2,490,325	39.4	54.9	24.3	37.7	41.2	52.0	57.8	22.3	26.2
55 to 64	1,072	735	337	3,303,083	1,594,612	1,708,471	32.5	46.1	19.7	30.5	34.4	42.8	49.4	17.6	21.8
65 to 74	728	448	280	2,025,575	936,610	1,088,965	35.9	47.8	25.7	33.3	38.6	43.4	52.3	22.7	28.7
75 to 84	1,001	561	440	1,420,413	590,956	829,457	70.5	94.9	53.0	66.1	74.8	87.1	102.8	48.1	58.0
85 & Older	877	386	491	546,767	187,361	359,406	160.4	206.0	136.6	149.8	171.0	185.5	226.6	124.5	148.7
Unknown	16	13	3												
Total	10,614	7,043	3,571	36,376,411	18,161,654	18,214,757	29.2	38.8	19.6	28.6	29.7	37.9	39.7	19.0	20.2
Age-Adjusted							29.6	40.8	19.1	29.1	30.2	39.8	41.7	18.5	19.7
AMERICAN INDIAN															
Under 1	1	1	0	3,420	1,749	1,671	29.2 *	57.2 *	0.0 +	0.0	86.5	0.0	169.2	-	-
1 to 4	0	0	0	10,132	5,219	4,913	0.0 +	0.0 +	0.0 +	-	-	-	-	-	-
5 to 14	1	0	1	44,098	22,317	21,781	2.3 *	0.0 +	4.6 *	0.0	6.7	-	-	0.0	13.6
15 to 24	8	3	5	45,586	23,211	22,375	17.5 *	12.9 *	22.3 *	5.4	29.7	0.0	27.6	2.8	41.9
25 to 34	15	11	4	36,784	18,309	18,475	40.8 *	60.1 *	21.7 *	20.1	61.4	24.6	95.6	0.4	42.9
35 to 44	16	8	8	43,965	21,368	22,597	36.4 *	37.4 *	35.4 *	18.6	54.2	11.5	63.4	10.9	59.9
45 to 54	22	18	4	42,504	20,200	22,304	51.8	89.1 *	17.9 *	30.1	73.4	47.9	130.3	0.4	35.5
55 to 64	5	4	1	26,857	12,754	14,103	18.6 *	31.4 *	7.1 *	2.3	34.9	0.6	62.1	0.0	21.0
65 to 74	3	0	3	12,903	5,996	6,907	23.3 *	0.0 +	43.4 *	0.0	49.6	-	-	0.0	92.6
75 to 84	1	0	1	6,734	2,840	3,894	14.9 *	0.0 +	25.7 *	0.0	44.0	-	-	0.0	76.0
85 & Older	0	0	0	3,868	1,435	2,433	0.0 +	0.0 +	0.0 +	-	-	-	-	-	-
Unknown	0	0	0												
Total	72	45	27	276,851	135,398	141,453	26.0	33.2	19.1	20.0	32.0	23.5	42.9	11.9	26.3
Age-Adjusted							25.4	31.6	19.5	19.5	31.4	22.3	40.8	12.0	27.0
ASIAN															
Under 1	5	2	3	48,115	24,552	23,563	10.4 *	8.1 *	12.7 *	1.3	19.5	0.0	19.4	0.0	27.1
1 to 4	9	4	5	188,290	96,379	91,911	4.8 *	4.2 *	5.4 *	1.7	7.9	0.1	8.2	0.7	10.2
5 to 14	16	9	7	498,432	257,125	241,307	3.2 *	3.5 *	2.9 *	1.6	4.8	1.2	5.8	0.8	5.0
15 to 24	93	65	28	567,146	291,640	275,506	16.4	22.3	10.2	13.1	19.7	16.9	27.7	6.4	13.9
25 to 34	80	62	18	618,710	302,916	315,794	12.9	20.5	5.7 *	10.1	15.8	15.4	25.6	3.1	8.3
35 to 44	61	35	26	671,272	321,320	349,952	9.1	10.9	7.4	6.8	11.4	7.3	14.5	4.6	10.3
45 to 54	83	54	29	609,567	284,594	324,973	13.6	19.0	8.9	10.7	16.5	13.9	24.0	5.7	12.2
55 to 64	66	40	26	385,197	179,303	205,894	17.1	22.3	12.6	13.0	21.3	15.4	29.2	7.8	17.5
65 to 74	85	42	43	245,629	107,974	137,655	34.6	38.9	31.2	27.2	42.0	27.1	50.7	21.9	40.6
75 to 84	98	48	50	154,086	64,809	89,277	63.6	74.1	56.0	51.0	76.2	53.1	95.0	40.5	71.5
85 & Older	56	32	24	50,569	20,013	30,556	110.7	159.9	78.5	81.7	139.7	104.5	215.3	47.1	110.0
Unknown	0	0	0												
Total	652	393	259	4,037,013	1,950,625	2,086,388	16.2	20.1	12.4	14.9	17.4	18.2	22.1	10.9	13.9
Age-Adjusted							16.6	21.4	12.4	15.3	17.8	19.2	23.5	10.9	13.9
BLACK															
Under 1	6	6	0	32,707	16,671	16,036	18.3 *	36.0 *	0.0 +	3.7	33.0	7.2	64.8	-	-
1 to 4	9	5	4	122,652	62,561	60,091	7.3 *	8.0 *	6.7 *	2.5	12.1	1.0	15.0	0.1	13.2
5 to 14	17	12	5	408,879	208,120	200,759	4.2 *	5.8 *	2.5 *	2.2	6.1	2.5	9.0	0.3	4.7
15 to 24	94	76	18	395,238	205,416	189,822	23.8	37.0	9.5 *	19.0	28.6	28.7	45.3	5.1	13.9
25 to 34	100	74	26	326,490	160,606	165,884	30.6	46.1	15.7	24.6	36.6	35.6	56.6	9.6	21.7
35 to 44	143	90	53	399,615	199,186	200,429	35.8	45.2	26.4	29.9	41.6	35.8	54.5	19.3	33.6
45 to 54	217	138	79	329,298	160,793	168,505	65.9	85.8	46.9	57.1	74.7	71.5	100.1	36.5	57.2
55 to 64	106	76	30	199,142	92,418	106,724	53.2	82.2	28.1	43.1	63.4	63.7	100.7	18.1	38.2
65 to 74	38	24	14	121,222	55,208	66,014	31.3	43.5	21.2 *	21.4	41.3	26.1	60.9	10.1	32.3
75 to 84	36	22	14	64,749	25,309	39,440	55.6	86.9	35.5 *	37.4	73.8	50.6	123.2	16.9	54.1
85 & Older	25	14	11	25,074	7,615	17,459	99.7	183.8 *	63.0 *	60.6	138.8	87.5	280.2	25.8	100.2
Unknown	0	0	0												
Total	791	537	254	2,425,066	1,193,903	1,231,163	32.6	45.0	20.6	30.3	34.9	41.2	48.8	18.1	23.2
Age-Adjusted							34.2	48.9	21.2	31.8	36.6	44.5	53.2	18.6	23.8
HISPANIC															
Under 1	32	15	17	273,401	139,443	133,958	11.7	10.8 *	12.7 *	7.6	15.8	5.3	16.2	6.7	18.7
1 to 4	89	48	41	1,003,339	512,381	490,958	8.9	9.4	8.4	7.0	10.7	6.7	12.0	5.8	10.9
5 to 14	97	58	39	2,503,684	1,279,931	1,223,753	3.9	4.5	3.2	3.1	4.6	3.4	5.7	2.2	4.2
15 to 24	549	424	125	2,275,634	1,199,542	1,076,092	24.1	35.3	11.6	22.1	26.1	32.0	38.7	9.6	13.7
25 to 34	511	420	91	2,332,753	1,244,497	1,088,256	21.9	33.7	8.4	20.0	23.8	30.5	37.0	6.6	10.1
35 to 44	494	406	88	1,954,969	1,014,652	940,317	25.3	40.0	9.4	23.0	27.5	36.1	43.9	7.4	11.3
45 to 54	355	276	79	1,228,904	607,654	621,250	28.9	45.4	12.7	25.9	31.9	40.1	50.8	9.9	15.5
55 to 64	204	146	58	636,784	298,857	337,927	32.0	48.9	17.2	27.6	36.4	40.9	56.8	12.7	21.6
65 to 74	116	66	50	357,389	157,978	199,411	32.5	41.8	25.1	26.6	38.4	31.7	51.9	18.1	32.0
75 to 84	106	68	38	190,758	78,695	112,063	55.6	86.4	33.9	45.0	66.1	65.9	106.9	23.1	44.7
85 & Older	64	31	33	58,423	20,677	37,746	109.5	149.9	87.4	82.7	136.4	97.1	202.7	57.6	117.3
Unknown	5	4	1												
Total	2,622	1,962	660	12,816,038	6,554,307	6,261,731	20.5	29.9	10.5	19.7	21.2	28.6	31.3	9.7	11.3
Age-Adjusted							24.7	36.7	13.1	23.6	25.7	34.7	38.6	12.0	14.2

Note : Rates are per 100,000 population. ICD-10 codes V01-X59, Y85-Y86.

Year 2000 U.S. Standard Population is used for age-adjusted rates.

American Indian, Asian, Black, Pacific Islander, White and Two or More Races exclude Hispanic ethnicity.

Hispanic includes any race category.

Deaths reported under Two or More Races are not duplicated in single race/ethnic groups.

\* Death rate unreliable, relative standard error is greater than or equal to 23 percent.

+ Standard error indeterminate, death rate based on no (zero) deaths.

- Confidence limit is not calculated for no (zero) deaths.

Source : State of California, Department of Finance; Population Projections with Age, Sex, and Race/Ethnic Detail, 2000-2050, May 2004.  
State of California, Department of Health Services, Death Records.

TABLE 1 (Continued)  
UNINTENTIONAL INJURY DEATHS  
BY RACE/ETHNICITY, AGE, AND SEX  
CALIFORNIA, 2004  
(By Place of Residence)

AGE GROUPS	DEATHS			POPULATION			RATES			95% CONFIDENCE LIMITS					
	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL		MALE		FEMALE	
										LOWER	UPPER	LOWER	UPPER	LOWER	UPPER
TOTAL															
Under 1	67	37	30	534,769	272,800	261,969	12.5	13.6	11.5	9.5	15.5	9.2	17.9	7.4	15.5
1 to 4	160	86	74	2,047,621	1,045,813	1,001,808	7.8	8.2	7.4	6.6	9.0	6.5	10.0	5.7	9.1
5 to 14	236	141	95	5,369,098	2,750,853	2,618,245	4.4	5.1	3.6	3.8	5.0	4.3	6.0	2.9	4.4
15 to 24	1,414	1039	375	5,294,261	2,757,217	2,537,044	26.7	37.7	14.8	25.3	28.1	35.4	40.0	13.3	16.3
25 to 34	1,305	1006	299	5,231,086	2,701,183	2,529,903	24.9	37.2	11.8	23.6	26.3	34.9	39.5	10.5	13.2
35 to 44	1,794	1251	543	5,672,590	2,883,426	2,789,164	31.6	43.4	19.5	30.2	33.1	41.0	45.8	17.8	21.1
45 to 54	1,944	1,340	604	4,931,148	2,440,823	2,490,325	39.4	54.9	24.3	37.7	41.2	52.0	57.8	22.3	26.2
55 to 64	1,072	735	337	3,303,083	1,594,612	1,708,471	32.5	46.1	19.7	30.5	34.4	42.8	49.4	17.6	21.8
65 to 74	728	448	280	2,025,575	936,610	1,088,965	35.9	47.8	25.7	33.3	38.6	43.4	52.3	22.7	28.7
75 to 84	1,001	561	440	1,420,413	590,956	829,457	70.5	94.9	53.0	66.1	74.8	87.1	102.8	48.1	58.0
85 & Older	877	386	491	546,767	187,361	359,406	160.4	206.0	136.6	149.8	171.0	185.5	226.6	124.5	148.7
Unknown	16	13	3												
Total	10,614	7,043	3,571	36,376,411	18,161,654	18,214,757	29.2	38.8	19.6	28.6	29.7	37.9	39.7	19.0	20.2
Age-Adjusted							29.6	40.8	19.1	29.1	30.2	39.8	41.7	18.5	19.7
PACIFIC ISLANDER															
Under 1	0	0	0	1,651	840	811	0.0 +	0.0 +	0.0 +	-	-	-	-	-	-
1 to 4	1	1	0	5,973	3,062	2,911	16.7 *	32.7 *	0.0 +	0.0	49.6	0.0	96.7	-	-
5 to 14	2	1	1	20,060	10,247	9,813	10.0 *	9.8 *	10.2 *	0.0	23.8	0.0	28.9	0.0	30.2
15 to 24	5	4	1	21,713	11,142	10,571	23.0 *	35.9 *	9.5 *	2.8	43.2	0.7	71.1	0.0	28.0
25 to 34	4	2	2	21,154	10,412	10,742	18.9 *	19.2 *	18.6 *	0.4	37.4	0.0	45.8	0.0	44.4
35 to 44	6	6	0	21,764	10,687	11,077	27.6 *	56.1 *	0.0 +	5.5	49.6	11.2	101.1	-	-
45 to 54	7	5	2	15,953	7,886	8,067	43.9 *	63.4 *	24.8 *	11.4	76.4	7.8	119.0	0.0	59.2
55 to 64	0	0	0	9,434	4,586	4,848	0.0 +	0.0 +	0.0 +	-	-	-	-	-	-
65 to 74	1	1	0	5,288	2,517	2,771	18.9 *	39.7 *	0.0 +	0.0	56.0	0.0	117.6	-	-
75 to 84	1	0	1	2,362	1,053	1,309	42.3 *	0.0 +	76.4 *	0.0	125.3	-	-	0.0	226.1
85 & Older	3	2	1	872	370	502	344.0 *	540.5 *	199.2 *	0.0	733.4	0.0	1,289.7	0.0	589.6
Unknown	0	0	0												
Total	30	22	8	126,224	62,802	63,422	23.8	35.0	12.6 *	15.3	32.3	20.4	49.7	3.9	21.4
Age-Adjusted							27.0	39.5 *	15.2 *	16.5	37.5	21.4	57.6	3.8	26.6
WHITE															
Under 1	21	13	8	164,750	84,066	80,684	12.7	15.5 *	9.9 *	7.3	18.2	7.1	23.9	3.0	16.8
1 to 4	49	27	22	617,372	315,162	302,210	7.9	8.6	7.3	5.7	10.2	5.3	11.8	4.2	10.3
5 to 14	97	57	40	1,722,936	886,271	836,665	5.6	6.4	4.8	4.5	6.8	4.8	8.1	3.3	6.3
15 to 24	644	452	192	1,856,335	960,424	895,911	34.7	47.1	21.4	32.0	37.4	42.7	51.4	18.4	24.5
25 to 34	582	427	155	1,808,165	922,586	885,579	32.2	46.3	17.5	29.6	34.8	41.9	50.7	14.7	20.3
35 to 44	1,059	696	363	2,502,123	1,278,269	1,223,854	42.3	54.4	29.7	39.8	44.9	50.4	58.5	26.6	32.7
45 to 54	1,251	846	405	2,639,194	1,328,451	1,310,743	47.4	63.7	30.9	44.8	50.0	59.4	68.0	27.9	33.9
55 to 64	688	468	220	2,005,398	987,820	1,017,578	34.3	47.4	21.6	31.7	36.9	43.1	51.7	18.8	24.5
65 to 74	483	313	170	1,260,712	596,472	664,240	38.3	52.5	25.6	34.9	41.7	46.7	58.3	21.7	29.4
75 to 84	755	420	335	988,209	412,295	575,914	76.4	101.9	58.2	71.0	81.9	92.1	111.6	51.9	64.4
85 & Older	727	306	421	402,581	135,267	267,314	180.6	226.2	157.5	167.5	193.7	200.9	251.6	142.4	172.5
Unknown	11	9	2												
Total	6,367	4,034	2,333	15,967,775	7,907,083	8,060,692	39.9	51.0	28.9	38.9	40.9	49.4	52.6	27.8	30.1
Age-Adjusted							35.6	47.5	24.2	34.7	36.5	46.0	49.0	23.2	25.2
TWO OR MORE RACES															
Under 1	2	0	2	10,725	5,479	5,246	18.6 *	0.0 +	38.1 *	0.0	44.5	-	-	0.0	91.0
1 to 4	3	1	2	99,863	51,049	48,814	3.0 *	2.0 *	4.1 *	0.0	6.4	0.0	5.8	0.0	9.8
5 to 14	6	4	2	171,009	86,842	84,167	3.5 *	4.6 *	2.4 *	0.7	6.3	0.1	9.1	0.0	5.7
15 to 24	21	15	6	132,609	65,842	66,767	15.8	22.8 *	9.0 *	9.1	22.6	11.3	34.3	1.8	16.2
25 to 34	13	10	3	87,030	41,857	45,173	14.9 *	23.9 *	6.6 *	6.8	23.1	9.1	38.7	0.0	14.2
35 to 44	15	10	5	78,882	37,944	40,938	19.0 *	26.4 *	12.2 *	9.4	28.6	10.0	42.7	1.5	22.9
45 to 54	9	3	6	65,728	31,245	34,483	13.7 *	9.6 *	17.4 *	4.7	22.6	0.0	20.5	3.5	31.3
55 to 64	3	1	2	40,271	18,874	21,397	7.4 *	5.3 *	9.3 *	0.0	15.9	0.0	15.7	0.0	22.3
65 to 74	2	2	0	22,432	10,465	11,967	8.9 *	19.1 *	0.0 +	0.0	21.3	0.0	45.6	-	-
75 to 84	4	3	1	13,515	5,955	7,560	29.6 *	50.4 *	13.2 *	0.6	58.6	0.0	107.4	0.0	39.2
85 & Older	2	1	1	5,380	1,984	3,396	37.2 *	50.4 *	29.4 *	0.0	88.7	0.0	149.2	0.0	87.2
Unknown	0	0	0												
Total	80	50	30	727,444	357,536	369,908	11.0	14.0	8.1	8.6	13.4	10.1	17.9	5.2	11.0
Age-Adjusted							13.2	17.5	9.4	10.1	16.4	12.1	22.9	5.9	13.0

Note : Rates are per 100,000 population. ICD-10 codes V01-X59, Y85-Y86.

Year 2000 U.S. Standard Population is used for age-adjusted rates.

American Indian, Asian, Black, Pacific Islander, White and Two or More Races exclude Hispanic ethnicity.

Hispanic includes any race category.

Deaths reported under Two or More Races are not duplicated in single race/ethnic groups.

\* Death rate unreliable, relative standard error is greater than or equal to 23 percent.

+ Standard error indeterminate, death rate based on no (zero) deaths.

- Confidence limit is not calculated for no (zero) deaths.

Source : State of California, Department of Finance; Population Projections with Age, Sex, and Race/Ethnic Detail, 2000-2050, May 2004.

State of California, Department of Health Services, Death Records.

TABLE 2  
UNINTENTIONAL INJURY DEATHS  
CALIFORNIA, 2002-2004  
(By Place of Residence)

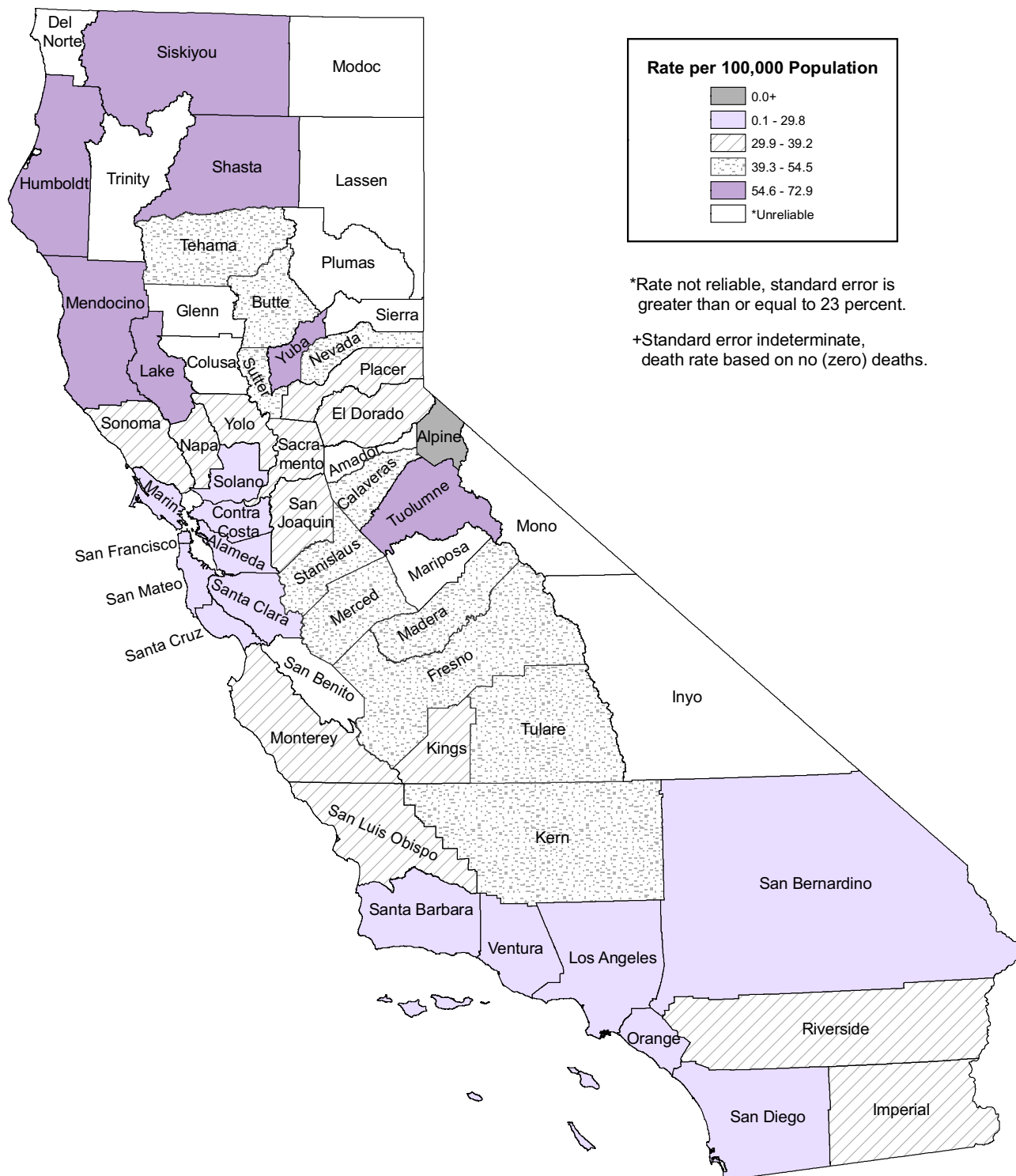
COUNTY	2002-2004 DEATHS (AVERAGE)	PERCENT	2003 POPULATION	CRUDE RATE	AGE-ADJUSTED RATE	95% CONFIDENCE LIMITS	
						LOWER	UPPER
CALIFORNIA	10,322.0	100.0	35,934,967	28.7	29.3	28.7	29.8
ALAMEDA <sup>1</sup>	377.7	3.7	1,495,367	25.3	25.8	23.2	28.5
ALPINE <sup>2</sup>	0.0	0.0	1,268	0.0 +	0.0 +	-	-
AMADOR	20.0	0.2	37,074	53.9	49.6 *	27.1	72.1
BUTTE <sup>1</sup>	117.7	1.1	212,473	55.4	52.6	42.8	62.3
CALAVERAS <sup>1</sup>	25.0	0.2	43,566	57.4	53.8	31.4	76.2
COLUSA	8.0	0.1	20,026	39.9 *	40.5 *	12.0	69.1
CONTRA COSTA	269.7	2.6	1,003,704	26.9	27.0	23.8	30.2
DEL NORTE	18.0	0.2	28,192	63.8 *	61.4 *	33.0	89.8
EL DORADO	53.7	0.5	168,227	31.9	32.6	23.6	41.7
FRESNO <sup>1</sup>	359.7	3.5	855,469	42.0	45.0	40.3	49.8
GLENN	12.7	0.1	27,626	45.9 *	45.8 *	20.4	71.2
HUMBOLDT <sup>1</sup>	94.7	0.9	129,515	73.1	72.9	58.0	87.7
IMPERIAL	61.7	0.6	153,673	40.1	37.3	27.2	47.5
INYO	13.3	0.1	18,617	71.6 *	61.5 *	25.7	97.3
KERN <sup>1</sup>	300.3	2.9	717,332	41.9	43.9	38.9	48.8
KINGS	47.7	0.5	138,763	34.4	36.8	26.0	47.7
LAKE <sup>1</sup>	43.3	0.4	62,359	69.5	64.3	44.2	84.4
LASSEN	16.7	0.2	34,633	48.1 *	47.8 *	24.4	71.1
LOS ANGELES <sup>1</sup>	2,270.3	22.0	10,047,236	22.6	23.3	22.3	24.2
MADERA <sup>1</sup>	62.7	0.6	133,965	46.8	47.8	35.9	59.7
MARIN <sup>1</sup>	56.0	0.5	250,252	22.4	20.7	15.2	26.3
MARIPOSA	14.3	0.1	17,886	80.1 *	79.2 *	36.1	122.4
MENDOCINO <sup>1</sup>	54.7	0.5	89,156	61.3	60.3	44.0	76.5
MERCED <sup>1</sup>	98.7	1.0	230,696	42.8	47.8	38.1	57.4
MODOC	9.0	0.1	9,541	94.3 *	89.6 *	28.7	150.5
MONO	7.0	0.1	13,443	52.1 *	53.4 *	10.2	96.5
MONTEREY	134.3	1.3	418,842	32.1	33.5	27.8	39.3
NAPA	48.3	0.5	130,920	36.9	34.0	24.2	43.7
NEVADA <sup>1</sup>	50.7	0.5	96,923	52.3	49.4	35.2	63.6
ORANGE <sup>1</sup>	657.7	6.4	3,001,146	21.9	23.2	21.4	25.0
PLACER	101.0	1.0	285,336	35.4	34.5	27.7	41.3
PLUMAS	11.0	0.1	21,181	51.9 *	40.9 *	14.8	66.9
RIVERSIDE <sup>1</sup>	618.3	6.0	1,758,719	35.2	36.0	33.2	38.9
SACRAMENTO <sup>1</sup>	437.3	4.2	1,331,563	32.8	33.7	30.5	36.9
SAN BENITO	17.0	0.2	56,605	30.0 *	31.8 *	16.4	47.3
SAN BERNARDINO	509.7	4.9	1,869,219	27.3	29.8	27.2	32.5
SAN DIEGO	820.0	7.9	2,989,178	27.4	27.7	25.8	29.6
SAN FRANCISCO	226.7	2.2	786,980	28.8	25.9	22.4	29.3
SAN JOAQUIN <sup>1</sup>	230.0	2.2	625,702	36.8	39.2	34.0	44.3
SAN LUIS OBISPO	91.3	0.9	257,452	35.5	32.7	25.9	39.5
SAN MATEO <sup>1</sup>	163.3	1.6	712,772	22.9	22.2	18.7	25.6
SANTA BARBARA	122.0	1.2	412,069	29.6	29.3	24.1	34.5
SANTA CLARA <sup>1</sup>	329.7	3.2	1,723,819	19.1	20.1	17.9	22.3
SANTA CRUZ	70.3	0.7	259,220	27.1	26.9	20.5	33.2
SHASTA <sup>1</sup>	103.0	1.0	175,421	58.7	56.6	45.3	67.9
SIERRA	4.0	a	3,563	112.3 *	104.6 *	0.0	214.5
SISKIYOU <sup>1</sup>	27.3	0.3	45,081	60.6	61.1	36.4	85.8
SOLANO	116.3	1.1	416,406	27.9	28.2	23.0	33.3
SONOMA	164.7	1.6	473,274	34.8	33.3	28.2	38.5
STANISLAUS <sup>1</sup>	223.3	2.2	489,491	45.6	47.7	41.4	54.0
SUTTER <sup>1</sup>	40.0	0.4	84,978	47.1	47.8	33.0	62.7
TEHAMA <sup>1</sup>	34.7	0.3	58,665	59.1	54.5	35.6	73.3
TRINITY	11.0	0.1	13,579	81.0 *	69.9 *	25.9	113.9
TULARE <sup>1</sup>	187.3	1.8	392,989	47.7	52.3	44.7	60.0
TUOLUMNE <sup>1</sup>	40.7	0.4	57,120	71.2	67.9	46.3	89.5
VENTURA	225.7	2.2	799,114	28.2	29.2	25.4	33.1
YOLO	57.3	0.6	183,602	31.2	36.0	26.5	45.5
YUBA <sup>1</sup>	35.7	0.3	63,979	55.7	57.7	38.6	76.8

Note : Rates are per 100,000 population. ICD-10 codes V01-X59, Y85-Y86.  
Year 2000 U.S. Standard Population is used for age-adjusted rates.  
\* Death rate unreliable, relative standard error is greater than or equal to 23 percent.  
+ Standard error indeterminate, death rate based on no (zero) deaths.

<sup>1</sup> County age-adjusted rate is significantly different from the state age-adjusted rate.  
<sup>a</sup> Represents a percentage of more than zero but less than 0.05.  
<sup>2</sup> Met or surpassed HP2010 target rate.  
- Confidence limit not calculated for no (zero) deaths

Source: State of California, Department of Finance; 2003 Population: Population Projections by Age, Race/Ethnicity and Sex, May 2004.  
State of California, Department of Health Services, Death Records.

**Figure 6**  
**Unintentional Injury**  
**Age-Adjusted Death Rates**  
**California Counties, 2002-2004**



Source: State of California, Department of Health Services, Death Records.  
 State of California, Department of Finance, Race/Ethnic Population  
 with Age and Sex Detail, 2000-2050. Sacramento, CA. May 2004.